

Request for City Council Committee Action From the Department of Public Works

Date: March 25, 2003

To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee

Referral to: Honorable Barbara Johnson, Chair Ways & Means Committee

Subject: Request for the Fourth Amendment for the Additional Tasks and Compensation for Contract No. 14440 for earth work and site improvements for the new 34 million gallon Hilltop Reservoir at New Brighton, MN.

Recommendation:

We request that the proper City Officials be authorized to amend the existing Contract No. 14440 of \$525,280.00 with STS Consultants, Ltd., by \$68,000.00 for a fee not to exceed \$593,280.00.

Funding is in place and available from the new Hilltop Reservoir, Water Treatment Capital Improvement, Fund 7400, Agency 950, org. 9515, General Obligation Water Revenue Bonds.

Previous Directives:

The City Council and the Mayor approved the original contract and amendments #1, #2 and #3 with STS Consultants, Ltd.

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Approved by: Klara A. Fabry, Director of Public Works

Klara A. Fabry, Director of Public Works

Presenters: Adam J. Kramer, P.E.

)	$^{\prime}$ No financial impact - or - Action is within current department budget. (using General Obligation
	Water Revenue Bonds)
	Action requires an appropriation increase to the Capital Budget
	Action requires an appropriation increase to the Operating Budget
	Action provides increased revenue for appropriation increase
	Action requires use of contingency or reserves
	_ Other financial impact (Explain):

Background/Supporting Information:

The Minneapolis Water Works (MWW) has provided the structural engineering and project construction management for the building of a new concrete 34 million gallon finished water reservoir at Hilltop. STS has provided the geotechnical design, inspection and concrete and soil testing for all phases of the construction.

The Timeframe for Major Phases:

First Phase of Soil Construction – Creation of six acres of new structural Fill veried in thickness from 2 feet. 28 feet to support the construction.	1997 –1999	
fill, varied in thickness from 2 feet - 38 feet, to support the concrete		
superstructure and to eliminate the need for pump station and to reduce		
operational and maintenance cost.		
 Second Phase – Construction of the cast-in-place concrete 	1999 – 2001	
superstructure and installation of interconnecting distribution system pipes.		
 Third Phase – Soil construction of steep reinforced earthen slopes to 	2001 - 2002	
support and to insulate the concrete superstructure. Also this phase involved		
the construction of the new Overflow Spillway and Impoundment System to		
address emergency situations and safety concerns.		
 Reservoir was ready and available for MWW use. 	October 2002	
 Fourth Phase – Site improvement, including landscaping. 	2003	

List of the required additional tasks, provided by consultant, related to the project's safety and security issues:

- The work for additional protective erosion control measures were requested to stabilize the extensive areas of disturbed existing vegetation and revised site grades throughout the overall reservoir complex during six years of construction. Also storms during 2002 produced significant rainfall with increased run-off occurring at various locations within and beyond the City of Minneapolis property. The additional design was performed to stabilize the affected areas and to protect adjacent residence.
- The design for the additional grid reinforcement, to construct and retain the reservoir's embankments beyond the limits of the original design. Adjustments were made to address modified layout related to the grading improvements for the maintenance roads and safety issues.
- The additional construction inspection services.
- The additional soil testing performed within the professional standards of industry. The additional testing services per newly enacted environmental regulations mandated more extensive screening and evaluation of imported fill (soil).
- The additional design work to improve the storm water collection, to maintain the safety and continuity of the construction operations, and to install the protective devices in the holding pond due to the site safety and security concerns.

Financing:

The funding is in place and available from the new Hilltop Reservoir Project, Water Treatment Capital Improvement (using General Obligation Water Revenue Bonds). The original contract with STS was \$165,000 in 1999. To date there have been three contract amendments. The first amendment added construction inspection services that was originally anticipated to be provided by the firm of TKDA. The second amendment extended the deadline to December 31,2001. The third amendment included the design of the new Overflow Spillway and Impoundment System due to the safety and security concerns, and also included additional inspection services. This proposed fourth amendment is for an additional cost of \$68,000 with a new total contract sum not to exceed \$593,280. It is scheduled to be completed by December 31, 2003.

Attachment 1 - Aerial view of Hilltop Reservoirs (2001)

Attachment 2 - Project display board

Attachment 3 - Construction of the reservoir foundation mat (1999)
- Construction of the concrete superstructure (2000-2001)

Attachments 5, 6, 7 - Creation of the reinforced slopes (2002)